

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

JANUARY 16, 1967



TAIWAN'S ECONOMIC GROWTH
CHANGES ITS EXPORT PATTERN

EEC'S DAIRY INDUSTRY
MOVES TOWARD PRICE GOAL

IVORY COAST AGRICULTURE

FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

A WEEKLY MAGAZINE OF THE UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE

FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

SEPTEMBER 5, 1966

VOLUME IV - NUMBER 36

5. number 3



Harvesting sugarcane in Taiwan, with sugar mill in background. Sugar was once the mainstay of the country's exports, but as the article on page 3, explains, the export pattern has changed

Contents

- 3 Taiwan's Economic Growth Changes Its Export Pattern
- 5 EEC Dairy Industry Moves Closer to a Common Price Goal
- 8 Ivory Coast Working To Diversify Its Agriculture
- 10 Glamour Treatment Aids Exports of Michigan Navy Beans
- 12 Good Export Market Foreseen for the Record U.S. Rice Crop
- 12 Baby Foods Steady Dollar Earners for the United States
- 13-15 World Crops and Markets (Commodity Index on Page 15)
- 16 Highlights of the Agriculture and Trade of the Sudan

Orville L. Freeman, Secretary of Agriculture

Dorothy H. Jacobson, Assistant Secretary for International Affairs

Raymond A. Ioanes, Administrator, Foreign Agricultural Service

Editor: Alice Fray Nelson

Associate Editors: Ruth A. Oviatt, Janet F. Beal, Elma E. Van Horn

Advisory Board:

W. A. Minor, Chairman; Donald K. Childers, Horace J. Davis, John H. Dean, David L. Hume, Robert O. Link, Kenneth W. Olson, Donald M. Rubel, Quentin M. West.

This magazine is published as a public service, and its contents may be reprinted freely. Use of commercial and trade names in the magazine does not imply approval or constitute endorsement by the Department of Agriculture or the Foreign Agricultural Service.

Foreign Agriculture is published weekly by the Foreign Agricultural Service, United States Department of Agriculture, Washington, D. C. 20250. Use of funds for printing this publication has been approved by the Director of the Bureau of the Budget (December 22, 1962). Yearly subscription rate is \$7.00, domestic, \$9.25 foreign; single copies are 20 cents. Orders should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20401.



Sugarcane seedlings are planted by hand on a Taiwan plantation.

Taiwan's Economic Growth Changes Its Export Pattern

By CLARENCE E. PIKE
Foreign Regional Analysis Division
Economic Research Service

Among the underdeveloped countries of Asia striking economic contrasts exist. Some are moving ahead industrially and agriculturally while others have failed to make good use of their resources. Typical of the first group are Taiwan and South Korea and of the second, Burma and Indonesia. Starting with this issue Foreign Agriculture presents a brief survey of the four countries.

Taiwan is one of the economic success stories of Asia. Starting from virtual chaos in the late 1940's, this island has progressed to the point where the average standard of living is now one of the highest in Asia, although still quite low by Japanese or Western standards.

Hard work on the part of the Chinese people under the guidance of a stable government is due most of the credit. Also, large injections of U.S. economic assistance have contributed substantially and have been used wisely.

Much of Taiwan's economic success, however, stems from the favorable climate that has been established for foreign investment, which totaled \$46 million in 1965, or more than double the 1964 level. Recently, electronics and petrochemicals have been the fields most attractive to investors, but other important fields have been pharmaceuticals, electrical appliances, textiles, food and mixed feed processing, tourist hotels, banking, and insurance. Most foreign investors have chosen to establish joint ventures with leading domestic enterprises.

Taiwan offers specific advantages to foreign investors, among them liberal tax benefits, a high level of technology, and an abundant supply of low-wage, literate, and adap-

table labor. Furthermore, to encourage the establishment of export-oriented manufacturing operations, the government created an export-processing zone located in Kaohsiung, a port city in South Taiwan.

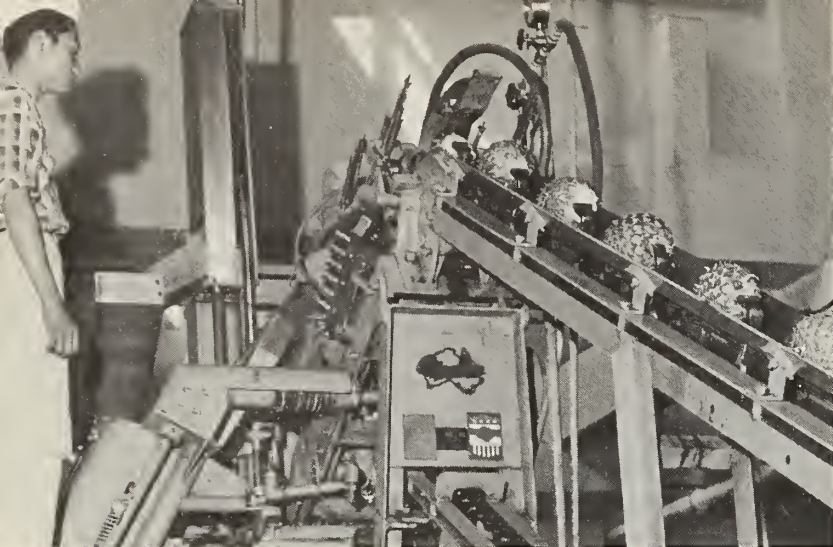
New export pattern

This industrial growth has changed Taiwan's export picture. Traditionally, Taiwan depended for its foreign exchange earnings primarily on the export of sugar, and to a lesser extent on rice. Today earnings from the export sale of products of light industries have risen rapidly while earnings from sugar have declined sharply—largely because of lower world prices. In the first half of 1966, when export sales at \$273 million were up \$13 million from those of the comparable period in 1965, the composition of these sales gave industrial products 48 percent, with agricultural products 24 percent and processed agricultural products 28 percent.

Simultaneously with this industrial boom, the country's agriculture has been expanding and diversifying, and this too has accounted for a change in Taiwan's exports. Farm production last year was at an alltime high. The rice crop, which accounts for roughly 40 percent of the total value of agricultural output, was expected to reach 3.2 million metric tons of paddy compared with 3.1 million in 1965. Pineapple production was expected to be up by 25 percent, and mushrooms by 20 percent. However, a June typhoon did considerable damage to the banana crop.

Government backs agriculture

The boosting of agricultural production and a steady improvement of Taiwan's agricultural marketing system have increased farm incomes and at the same time brought about a stabilization of commodity prices. A slight decline



Below, pineapples move on an automatic conveyor in one of Taiwan's new canning factories. At left, modern machinery performs the syruping, sterilizing, and sealing of fruit. Left below, examining plywood, now one of Taiwan's important export products.



in food prices occurred in 1965 and was an important factor in stabilizing the cost of living. In the past 12 months or so rice prices have fallen by approximately 2 percent, but no significant changes are expected in the foreseeable future.

Promotion and diversification of agricultural exports is basic government policy, incorporated in the overall agricultural development plans for the island. The export of primary and processed agricultural products earned \$313 million in foreign exchange in 1965—up from only \$121 million in 1963.

The increasing number of agricultural export items has accounted for this growth and has helped to balance the trade deficit, despite the slump in the international price of sugar. Exports of bananas and pineapples have moved steadily upward. Bananas, with an export value of \$56 million, were second only to sugar as a foreign exchange earner in 1965. Exports of canned fruits and vegetables—principally pineapples, mushrooms, and asparagus—were expected to hit a high of \$75 million last year, up from \$58 million in 1965.

Farm imports needed

Taiwan is also a substantial importer of agricultural products because of its tropical climate, limited land area, and rapid population growth. Its expanding industries require agricultural raw materials—such as cotton for textiles. Development of the country's livestock and poultry industries is likely to create a need for feedgrains.

In recent years Taiwan's imports of food and agricul-

tural raw materials have averaged around \$125 million annually, and these are expected to increase at a fairly rapid rate. Up until 1965 part of the country's agricultural import needs came from the United States under Title 1, Public Law 480. The island has since shifted to financing its U.S. imports for dollars or under Title IV, P.L. 480 (long-term credit.)

In the past the principal agricultural imports have been wheat, wheat flour, cotton, tobacco, and vegetable oils. Imports of these commodities are likely to continue and increase, but the range of imports is also expected to expand. The United States should be able to share fully in this market. In view of this, Wheat Associates, U.S.A., Inc., an American market development organization in Tokyo, has begun a wheat and wheat products program in Taiwan. The National Renderers Association has also started a marketing program for tallow.

Taiwan now a model

With climatic conditions similar to those of most south-east Asian and African countries, Taiwan's agricultural progress provides a model which can be studied to advantage by many underdeveloped countries. As a recent "takeoff" nation, Taiwan is particularly well qualified to help other developing countries with advice and cooperation, though naturally not with large contributions of capital. However, numerous agriculturalists from South-east Asian countries have been given training in Taiwan, and agricultural assistance teams have been sent to work in South Vietnam and about a dozen African countries.

EEC Dairy Industry Moves Closer to a Common Price Goal

By DAVID L. SCHLECHTY
Dairy and Poultry Division, FAS

The Common Agricultural Policy (CAP) for Dairy was adopted by the EEC Six (Belgium, the Netherlands, Italy, France, West Germany, and Luxembourg) in early 1964, with initial implementing regulations becoming operative that November. Its primary objective is to support incomes of EEC milk producers.

The final stage of the Dairy CAP is scheduled for April 1, 1968, when unified or common prices for milk and milk products among the Six will be established.

Introduction of the CAP for Dairy was one of the EEC's biggest strides toward a common agricultural market, since these products make up an important part of Community agriculture. Dairying engages a large portion of the total farm population, and milk and dairy products together with dairy animals (the principal source of beef) provide nearly one-third of total farm income in the Community.

Member States of the EEC have now passed the midpoint in their transition to a single farm price for milk and milk products with the common milk price set at \$4.67 per hundred pounds. But before the common milk price becomes operative, EEC dairymen and world traders must cope with another year of price adjustments and further surpluses of butterfat.

Producer prices adjusted upward

Prior to the Dairy CAP, prices producers received for milk ranged from \$3.54 to \$4.76 per hundred pounds—lowest in the Netherlands and highest in Italy. When the CAP was implemented prices were adjusted to fall within a target range established by the EEC Commission. The first target range set by the Commission was \$3.62 to \$4.76 per hundred pounds and was applicable from November 1, 1964, to March 31, 1965. (Actual target prices ranged from \$3.62 in France to \$4.72 in Italy.)

Since then, prices have been adjusted generally upward so that supports in the 1966-67 marketing year range from \$4.11 to \$4.67 per hundred pounds. Except in Italy, where prices were reduced by 9 cents per hundred pounds, prices in all other countries have risen from 16 cents to 67 cents under the Dairy CAP. The table below shows the target price range set by the EEC and prices in

Member States before and after the Common Agricultural Policy for Dairy.

The common milk price is the average price guaranteed to all producers for all milk sold. The price agreed upon is \$4.67 per hundred pounds of milk at the dairy, which will mean further price increases for France, West Germany, and the Netherlands. These three countries are the principal milk producing and trading countries in the EEC and together account for nearly four-fifths of the Community's total milk production. A calculated common price at the farm is \$4.42 per hundred pounds, which allows for average transportation and milk handling costs—from farm to dairy—of 25 cents per hundredweight within the Community. The greatest price increases will occur in France and the Netherlands whose producers' current target prices are \$4.11 and \$4.21 per hundred pounds, respectively.

Response to price adjustments

The impact of price adjustments over this short time is difficult to measure. France, particularly, has a great latent capacity to produce and during the past 2 years under the Dairy CAP, French producers have responded to higher prices by producing 11 percent more milk in 1966 than in 1964 (see table below). Dutch production during the same period rose over 5 percent. Although the target price in Italy was reduced slightly, there is some question as to whether this reduction was actually passed on to producers.

Threshold prices or minimum import prices are the backbone of the entire system for dairy products. Threshold prices are intended to assure product prices high enough to maintain producer prices at the target level. They are based on reference prices, which are average at-factory dairy product prices in Member States' markets during 1963. Threshold prices are equal to reference prices plus "standard amounts" designed to encourage intra-Community trade. The standard amounts vary according to product groups from about one-third cent per pound for whey powder to 2¼ cents per pound for butter. For some products an "additional amount" is added which represents the difference between the reference and intervention price. The intervention price is the price at which the intervention agencies purchase butter on the market in order to support prices. Other products such as nonfat dry milk and cheese may also be purchased, but only after the Commission is informed of this intention.

CHANGES IN PRODUCER MILK PRICES				
Country	1963	1964-65 ¹	1965-66 ¹	1966-67 ²
	U.S. dol. per 100 lb. ³	U.S. dol. per 100 lb. ³	U.S. dol. per 100 lb. ³	U.S. dol. per 100 lb. ³
Belgium	3.63	4.29	4.47	4.47
France	3.64	3.62	3.86	4.11
Germany, West	4.09	4.28	4.31	4.31
Italy	4.76	4.72	4.67	4.67
Luxembourg	4.33	4.49	4.49	4.49
Netherlands	3.54	3.88	4.02	4.21
EEC target price range		{ 3.62- 4.76	{ 3.74- 4.67	{ 3.91- 4.67
Weighted average ⁴	3.92	4.05	4.16	4.23

¹ November 1, 1964, to March 31, 1965. ² Marketing year basis (April 1 - March 31). ³ With 3.7 percent butterfat. ⁴ Weighted by amount produced.

EEC COW MILK PRODUCTION BY YEARS SINCE IMPLEMENTATION OF DAIRY REGULATIONS			
Country	1964	1965	1966 ¹
	Million pounds	Million pounds	Million pounds
Belgium	8,426	8,690	8,775
France	55,615	57,885	61,360
Germany, West	45,945	46,693	47,500
Italy	19,768	20,361	20,770
Luxembourg	400	414	420
Netherlands	15,335	15,745	16,060
Total	145,489	149,788	154,885

¹ Partially estimated.

Threshold prices are set by each Member State during the interim or transitional period to common prices for various product groups. There are 14 dairy product groups plus Cheddar cheese, Tilsit cheese, and nonfat dry milk for livestock feed. The representative product in each group is called a pilot product. In general, market prices of pilot products correspond to threshold prices.

In the table below are shown reference prices, original threshold prices, and theoretical common threshold prices. The range shown for the reference and original threshold prices indicates the price spread in the Community at the time the CAP for dairy products was implemented. In most instances the low side of the range corresponds to French prices while the high side of the range represents Italian prices, two extremes within the Community. Also, for each product group threshold prices are higher than reference prices by the standard and additional amount.

Import levies are calculated

The Dairy CAP provides for harmonizing dairy product prices and protection from outside competition by a system of variable import levies. This system replaces national import duties and quantitative import restrictions. Levies are calculated on the basis of the fixed threshold or minimum import prices and free-at-frontier or border prices. Free-at-frontier prices are fixed by the EEC Commission every 2 weeks for the pilot products.

Frontier prices applicable for third countries are in essence based on lowest third-country offering prices to the Community.

Import levies correspond to the difference between the threshold price in the importing country less any internal duties and the free-at-frontier price. Deduction of the standard amount in intra-Community trade provides a measure of Community preference. When Community

prices are harmonized in 1968, levies on trade between Member States will disappear. Levies on imports from third countries will remain.

Levies are calculated separately for each pilot product and for all other dairy products are then derived from those charged for the pilot product. For example, the levy on butter oil is derived from the levy on butter.

Export subsidies, free-at-frontier prices

Export subsidies are also paid on dairy products. As in the case of import levies, export subsidies are, to a large extent, based on free-at-frontier prices. Since the EEC claims these prices are "representative" of the most favorable purchasing possibilities in international trade, it is these prices the Community must compete against if it is to export.

A case can be made that the EEC free-at-frontier prices are not representative of world price levels but are rather "maverick" (lowest offering) prices which do not accurately reflect true market conditions. For example, in the case of butter, the EEC free-at-frontier price in recent months has consistently been below prices on the London market, which accounts for 75-80 percent of total free world butter trade. In mid-December the EEC free-at-frontier price for butter was 22 cents per pound. At the same time most offering prices for butter in London ranged from 38 to 45 cents per pound. Because of these low free-at-frontier prices—in many cases based on low sporadic offering prices from a few state trading countries, such as East Germany—the EEC justifies payment of large export subsidies.

Current export subsidies on butter paid by Member States range as high as two-thirds to three-fourths of domestic wholesale prices. In various markets throughout the world during most of 1966, some member countries

EEC REFERENCE, THRESHOLD, AND COMMON THRESHOLD PRICES

Product group no.	Pilot product	Reference price range ¹	Threshold price range 1964-1965	Common threshold price ²
1	Lactosermum powder	Cents per lb. 7.70-11.68	Cents per lb. 8.04-12.02	Cents per lb. 9.75
2,3	Milk powder:			
	Whole	26.82-44.85	27.72-45.76	45.70
	Skimmed	13.38-24.24	13.95-24.81	23.25
4,5	Condensed milk:			
	Without sugar	16.22-32.66	16.90-33.34	20.64
	With sugar	23.31-39.99	24.21-40.90	27.67
6,12	Cheese:			
	Gorgonzola	47.17-54.50	48.31-55.64	59.42
	Parmigiano and Reggiano	65.75-65.79	66.89-66.92	91.29
	Emmenthal	47.49-61.10	48.63-49.90	66.23
	Gouda	33.08-52.33	34.21-53.46	54.77
	Saint-Paulin	39.69-51.17	40.82-52.30	53.30
	Camembert	45.10-50.72	47.11-51.85	54.77
	Curds	63.15-75.98	64.29-77.11	
13	Lactose	14.66-22.21	15.23-22.78	19.50
14	Butter	54.88-88.61	59.42-94.28	³ 86.75
	Other:			
	Cheddar	29.57-55.31	30.70-34.59	59.54
	Tilsit	33.08-52.33	34.21-53.46	54.75
	Skim milk powder (for animal feeding)		13.38-14.18	15.88

¹ Arithmetic mean of ex-factory prices in 1963. ² Theoretical threshold price calculated from common target prices of \$4.67 per hundredweight of milk (3.7% fat) at dairy plants. (To become effective April 1, 1968.) ³ Intervention price for first-quality fresh butter will be fixed at 79.95 cents per pound.

offered butter, delivered, at around 25 cents per pound. Some offerings were even lower.

Internal complications will remain

The final unification of the member countries' dairy markets will eventually reduce the number of price variables and eliminate most national support measures. However, unification is not expected to simplify greatly the internal price structure. Intra-Community trade barriers will disappear, but varied production, marketing, and distribution conditions will, in the short run, remain. Because of these factors, some short-run dislocations of internal trade and marketings are expected.

One example of dislocation has been the butterfat surplus problem which has plagued the Community to an increasing degree since implementation of the dairy regulations. This is especially significant since the EEC accounts for two-thirds of total Western European milk output and 70 percent of total butter production.

Milk production sets record

Increased milk output in the EEC has been encouraged by Community price adjustments. Production of all principal manufactured dairy products (butter, cheese, and nonfat dry milk) has increased. The Community's butter and nonfat dry milk production established records in 1965, and from all preliminary indications output in 1966 will be even greater.

As a result, butter stocks have reached new highs. Despite increased output, prices are up and consumption down. Stocks on July 1 were at record levels and holdings in the Six totaled 361 million pounds compared with 325 million pounds a year earlier, and an average of 243 million pounds for 1962-64. Nearly 90 percent of the holdings are in France and West Germany.

The problem of large butter stocks—which have accumulated since implementation of the Dairy CAP—has prompted the EEC to adopt special schemes to reduce stocks. Some have been aimed at the domestic market and others to third-country or export markets.

Plans to reduce surpluses

Last June, the EEC Commission authorized West Germany to sell 93 million pounds of cold storage butter on the domestic market at reduced prices. The Commission made it clear that the authorized price reduction of about 11 cents per pound was expected to increase butter consumption and reduce German stocks. Similar authorizations led to the sale of 153 million pounds of storage butter at reduced prices within the Community between May 1965 and February 1966. The bulk of this butter—132 million pounds—also was of West German origin; the remainder, Dutch and Belgian.

While it is true these actions encouraged domestic consumption, increased production offset consumption gains and stocks continued to rise. Mindful of these production gains and rising stocks, the Commission—as recently as September—adopted yet another measure to permit butter sales at "bargain" prices. The latest authorization allows West Germany and France to sell 44 million and 22 million pounds of butter respectively, from public stock. The German butter was placed on its domestic market at reduced prices through November, while the French are authorized to sell their allocation to processing industries

in France, Belgium, and the Netherlands until April 1967. Prices to the processing industries for the French butter are around 23½ cents per pound. Products processed from this butter must be exported to nonmember or third countries.

It appears that the major difficulty the Community's dairy economy will face as it moves toward the common price goal will continue to be butter surpluses. This appears likely as prices are adjusted upward both at the farm, which will encourage further production gains, and at retail, which will discourage consumption. As the Community becomes an increasingly larger surplus-producing area, government support costs for milk—expected to total over half a billion dollars in 1966—will also rise.

Surplus continuing to 1970

Current projections conservatively place the EEC milk surpluses by 1970 at 2 percent of total production—3 billion to 4 billion pounds. Since government support or intervention measures (in other words, direct government purchases) are primarily limited to butter, when production exceeds consumption, market equilibrium will depend on government butter purchases. This will entail further programs designed for surplus disposal, possibly meaning even larger and more heavily subsidized exports of the burgeoning butter stocks.

The initial cost of dairy surpluses in the Common Market will be borne by the Six. But an unstable world dairy situation, with lower prices which invariably accompany surpluses, will be costly to all dairy countries.

New Trinidad Marketing Agency

The Government of Trinidad and Tobago recently provided for the establishment of a Central Marketing Agency to take over the responsibilities of its former Marketing Board.

The new Agency is expected to have wide powers, including complete control over all exports and regulation of the flow of imports to protect certain sections of domestic agricultural production.

The Central Marketing Agency is intended as a means of streamlining the agricultural marketing system. The functions of the Agency would include the setting of minimum wholesale prices for commodities which it is obliged to purchase at this minimum price, and trading and dealing in feeding stuffs for livestock and other agricultural supplies. The Agency would also operate markets and cold storage plants and auction farm products.

It is expected to be an important factor in linking agriculture and industry. For example, when expansion of food processing is contemplated, the Agency could decide to stimulate production by guaranteeing purchase of a commodity at a fixed price for subsequent resale to a processing plant.

The Minister of Agriculture reportedly may—after consultation with the Agency—regulate the quantity of a particular agricultural product which may be imported. In settling the terms of such a regulation, the Minister would be required to consider the effect regulation of imports of any product is likely to have upon commercial relations between Trinidad and Tobago and the exporting countries.

Ivory Coast Working To Diversify Its Agriculture

By DUDLEY G. WILLIAMS
*U.S. Agricultural Attache
Monrovia, Liberia*

Diversification of the Ivory Coast's agriculture, a major objective of the nation's current development plan, is moving steadily forward, and the outlook is for continued progress in the years ahead.

Largest crops continue to be coffee and cocoa, with the Ivory Coast ranking third and fourth, respectively, in world production of these commodities.

The diversification program, however, is de-emphasizing coffee, in which there is a world surplus, and emphasizing crops for which future marketing prospects are more favorable. These include oil palms, coconuts, rubber, cotton, and such already important exports as bananas, pineapples, and tropical wood.

At the same time, the country is attempting to increase rice production with the goal of eliminating imports and eventually exporting. This priority given to rice is important in view of threatening world food shortages. If goals are achieved, the Ivory Coast should be supplying its rice needs by the time world shortages reach critical stages. Additionally, self-sufficiency in rice will free normal foreign-exchange expenditures for imported rice, making more funds available for development.

Production of oil palms stressed

Major objective of the program is expansion in oil palm production. Ivorian officials foresee gains in world demand for quality vegetable oils in line with population growth and improvements in levels of living.

Oil palm production efforts are under the administra-

tion of the Society for the Development and Exploitation of Oil Palm (SODEPALM), a state agency. Massive financial assistance from the European Common Market Development Fund (FED) has enabled rapid movement in land preparation and planting, and the first phases of the oil-palm program are ahead of schedule.

The first phase of the FED project involves 4,700 hectares (about 11,600 acres) to be planted by 1970, 3,300 (8,200) of which are already planted. Of the first phase, 2,200 hectares (5,400 acres) were devoted to industrial plantations and 2,500 (6,200) to village plantations. By the end of 1965, village plantations had already surpassed 2,000 hectares (4,900 acres).

The second and by far the largest agreement was signed in June 1965 by the Ivory Coast and FED; it involves 32,000 hectares (79,100 acres) and six oil mills at a development cost of \$44 million. At least 10 percent of the acreage must be devoted to village plantations. Development of this project is underway and is also reportedly running ahead of schedule.

A third project financed by the International Bank for Reconstruction and Development will involve 25,000 hectares (61,800 acres)—of which 13,000 (32,100) will be in industrial plantations and 12,000 (29,700) in village plantations. The new plantings will be in relatively underdeveloped areas and reportedly will replace considerable coffee stands now existing in those areas.

The industrial plantations, which are to include processing plants, will form the nucleus of the SODEPALM program and will be surrounded by a band of village farms. This concept was adopted as a means of assuring maximum participation by the villagers in the shortest possible time. In addition to having an outlet for production, the farmers will have access to the latest research recommendations and certain technical assistance.

Each village farmer is allocated up to 5 hectares (12 acres) for oil palm upon request. If he then agrees to fol-



Left, "tree crusher" clears the way for new industrial oil palm plantations in the Ivory Coast. Below, headquarters of one of those plantations. (Photos courtesy of SODEPALM.)



low practices recommended by SODEPALM, based on experimental results obtained by the Research Institute for Oils and Oil Bearing Plants (IRHO), he will be eligible for SODEPALM production assistance.

SODEPALM assumes the expense of taking the seedlings from the nursery, transportation to the farms, actual planting of the seedlings, seeds and fertilizer for the cover crop, fencing, management assistance, and surveying and land registration. In addition, SODEPALM credit is provided on an extended repayable basis to cover the cost of seedlings, fertilizer, and insecticides. SODEPALM also advances credit for clearing and maintaining land.

Under the current plan, the individual village farmer can now produce a cash crop for himself and his family, whereas, traditionally, oil-palm production was a communal village enterprise.

Eventually, the industrial plantations will be taken over by the village farmers. In the meantime, revenues accruing to SODEPALM from the industrial plantations will be distributed to three funds: The Agricultural Fund, which is designed to further diversify and improve agriculture; the Social Fund, which is aimed at improving village schools, roads, and other facilities; and the Expansion and Improvement Fund for oil palm plantations.

Rice another priority crop

The Ivory Coast's deficit in rice—now about 90,000 tons annually—is viewed by most observers as unnecessary, and serious efforts are now being made to increase and improve both irrigated and raingrown production.

The Ivory Coast is one of Africa's largest recipients of rice-production assistance from Taiwan, which is providing about 160 technicians. Top government officials, as well as the Taiwanese, are confident that the Ivory Coast will be self-sufficient in rice by 1970, with a production of around 400,000 tons (paddy basis), compared with about 225,000 currently. Ivorian officials also foresee export availabilities at some later date.

Rising incomes in the Ivory Coast are resulting in changing taste preferences—always from the traditional country, or rough, rice to milled rice. The government plans to establish rice mills throughout the country so that consumption requirements can be effectively filled.

Plans for coconut and rubber

Under a project started last year, 15,00 hectares (37,100 acres) of coconuts will have been planted in southern regions of the Ivory Coast by 1970. Thirty percent of the plantings will be on village farms, while the remainder will be industrial plantings. The first 1,000 hectares (2,500 acres) are being financed by the French Assistance Fund (FAC), and 14,000 (34,600) by the IBRD.

The first rubber plantings were made in the Ivory Coast in 1953 on a limited area. Currently, there are approximately 11,000 hectares (27,200 acres) under industrial rubber plantings, of which about 2,600 (6,400) are producing. This area is being managed by two organizations, with the larger having control of about 8,000 hectares (19,800 acres) including all the trees currently in production. There is one modern latex-processing plant in operation, and the output (over 4,000 tons dry-weight basis) is exported to Europe.

Rubber is expected to become an increasingly important export item over the next several years as additional trees

come into production. The larger of the management organizations will plant 25,000 additional hectares (61,800 acres) in the near future. Also, feasibility studies have been completed in the southwest, where plantation development on 35,000 hectares (86,500 acres) or more reportedly will be made if financing can be obtained.

Gradual success in cotton

Efforts by the Cotton Research Center (IRCT) in Bouake and by the French Company for the Development of Textile Fibers (CFDT) to expand cotton production in the Ivory Coast are meeting with gradual but increasing success. The IRCT has been engaged in cotton research in Africa for many years, and the Bouake Center carries on varietal, soil, fertilization, and insect control tests to determine the most suitable conditions for developing and improving cotton production in the Ivory Coast.

Concurrent with IRTC efforts, the CFDT, which is the purchasing and commercialization organization for Ivorian cotton, employs extension monitors to encourage and assist farmers in improving production practices.

The activities of these organizations have intensified with the increasing emphasis on diversification, and the monitor system reportedly will be capable of covering up to 50,000 hectares (123,600 acres) in 1967. Larger quantities of fertilizers and insecticides are also being made available to the farmers. Fertilizer and insecticides are provided by the CFDT during the season, and the farmer makes payment at the time his cotton is sold.

Production practices recommended by the research and marketing organizations are being accepted more readily throughout the growing areas, which are primarily in the northern and central regions of the country. Consequently, the original goal of 50,000 metric tons (seed basis) from 95,000 hectares (234,700 acres) by 1970 is now expected to be reached by 1968 or 1969. In 1960, an estimated 70,000 hectares (173,000 acres) produced only about 7,000 tons of seed cotton.

The traditional low-yielding "mono" variety is rapidly being replaced by improved "allen." A new high-producing hybrid, scheduled for introduction in 1967, is expected to improve yields even further. Besides supplying the local textile industry with raw material, the expanding production will result in increased exportable supplies of raw cotton. In recent years, the Ivory Coast has exported 1,000-2,000 tons of cotton (seed basis), mainly to France and other European countries.

Mechanization on the upswing

An Agricultural Mechanization Organization (MOTOR-AGRI), has been established with regional stations in various areas of the Ivory Coast. The organization currently has 150 tractors of various types and will have 240 eventually. The equipment has been in operation only a short time and up to now has been primarily used in land preparation for rural housing, school construction, and road building. However, the equipment with operators is to be made available to Ivorian farmers on a custom basis.

Although present schedules for attaining objectives under the diversification program may prove to be overly optimistic in some cases, a sound program has been launched and is being effectively implemented, and possible delays should be offset by the phases of the program which are already moving ahead of schedule.

Glamour Treatment Aids Exports of Michigan Navy Beans

By PHILIP M. DeVANY
*Michigan Bean Shippers Association**

The Michigan Bean Shippers Association, in cooperation with the Foreign Agricultural Service, began its market development program in Europe in 1963. The purpose of this program is to expand the market base for Michigan navy beans.

We believe this expanding market base will—in the long run—provide Michigan navy bean producers with a more reliable and constant market than a market consisting only of domestic canners and packagers.

Michigan produces over 99 percent of all U.S. navy beans—by far the largest commercial class of dry beans in this country—and some 93 percent of all navy beans grown in the world. It is anticipated that in the near future navy bean production in Michigan will reach 9 million to 10 million bags a year. Domestic consumption takes only about 4½ million to 5 million bags.

Our European market development program centers on the promotion of navy beans in canned form. Our main goal is to sell more beans to canners. A second goal, which helps in gaining the first, is to develop a greater appetite for canned navy beans among European consumers.

Much of the information on which we based later market development activities was collected in two projects carried out the first year of the program. One was a survey trip to Europe made by a team of Association members. The other was a survey of bean usage in France, Belgium, the Netherlands, West Germany, Switzerland, and Italy.

Problems expected

When we started our program we anticipated three major problems.

First, we expected that it would be difficult to establish in the minds of European importers and canners the identity of this one particular type of white bean.

Second, we thought that Europeans were probably abstaining from beans by choice—as a result of wartime and

postwar experiences with packaged or bulk dry beans of all types.

Third, we thought that European housewives might not be ready for convenience foods.

The first two problems turned out to be much as anticipated. The third did not materialize. Not only were European housewives — more and more of whom were working outside the home — ready for convenience foods, many considered them to be a necessity.

Establishing product identity

The Michigan navy bean is a small, uniform-size bean with a tender seed coat—a bean especially designed and created by plant breeders for the canning industry. To produce it, plant scientists at Michigan State University have bred thousands of generations of beans. To keep it the exact product that the canner wants is a year-in year-out program. If even a single domestic canner finds an unwanted canning characteristic, the breeders go back to the laboratory to create a product with even better canning characteristics. This bean is also very adaptable to home use.

Our first job was to acquaint our potential customers with our product and its special qualities. To accomplish this, we established the *Michigan Navy Bean News*—a quarterly journal with text in English, French, and German. We send this journal to bean canners and importers throughout Europe. At the start we devoted the *News* to articles identifying the Michigan navy bean and demonstrating ways that foreign and domestic canners have made profits by canning it.

The journal has already accomplished its initial purpose. Today Michigan navy beans are well known to major European canners and importers—even in such countries as Italy and Spain where Association representatives have made few personal contacts.

Consequently, we are now changing the emphasis of the journal's contents. Future issues will carry technical articles on the canning process—information foreign canners and importers have been requesting. The Association has arranged with the Depart-

ment of Food Science of Michigan State University to supply the technical articles and to answer individual inquiries from readers about their canning problems.

Cultivating a taste for beans

The fact that many Europeans would not eat beans by choice in 1963 was a handicap that had to be overcome before we could make any headway in developing a market. In West Germany, for example, bean consumption was less than 1 pound per person per year.

We made a two-pronged attack on this problem. First, we set about to glamorize beans in order to attract people to them. Then we persuaded people to taste them. We believed that once the beans were tasted the problem of acceptance would be largely solved.

Participation in the U.S. exhibits at European trade fairs provided us a perfect vehicle for both activities.

To attract visitors to our booth at a trade fair, we displayed a series of striking transparencies of dishes cooked from Michigan navy beans. These were not run-of-the-mill transparencies, but topnotch illustrations prepared in Paris with such skill and care that they could hold their own with the best art in the most fashionable women's magazines. Bean dishes were shown in attractive mealtime settings—in the company of fine china, silver, crystal, linen, candles, and bottles of good wine.

The reaction of our visitors at trade fairs in Amsterdam, Paris, Cologne, and Munich was just as we predicted. The transparencies attracted, but the idea of beans repelled. Visitors would be drawn to the illustrations but would start to turn aside as soon as they read the captions stating that the dishes were made from "witte bonen," "haricots blanc," or "weisse bohnen."

Our demonstrators had been told to expect this reaction, and, if necessary, to shove a sample into the visitor's hand. Many people who were thus somewhat abruptly introduced to Michigan navy beans came back for second and third helpings.

Samples of our products have been

* Member of National Dry Bean Council, FAS cooperator in overseas market development.



Above, West German consumers sample canned Michigan navy beans. Above right, illustration used at 1966 trade fairs. Right, six products sampled at Munich fair last year.



served at trade fairs to over 200,000 persons on the Continent—some 100,000 in West Germany alone. They have become so well accepted by Germans, in fact, that one company that exports canned Michigan navy beans to that country expects to double its sales in the next fiscal year.

Trade fair participation by the Association has been useful to our market development program in two other ways. It has given the canners of our beans a very wide exposure to potential customers. Also it has shown our canner customers that the Association is interested in helping them to develop a market. In effect, through trade fair participation, the Association services a client with an essential followthrough.

Accent on convenience

To emphasize the convenience of canned Michigan navy beans, demonstrators serve easy-to-prepare dishes for sampling. The sample dishes take 10 minutes or less to prepare, a fact made known to the samplers. Although elaborate and colorful dishes are also prepared by demonstrators, these are used only for display.

Many European housewives look

on beans as a side vegetable dish rather than a main dish. Making use of this fact, one canner tripled his sales simply by moving his display in a store from the general food shelves to the fresh vegetable stand.

To encourage European housewives to serve canned beans as a main course—which probably would increase bean consumption—demonstrators are directed to suggest such use. They may do this by adding bacon strips, sausage, or ham to the bean sample or by serving canned pork and beans with a piece of brown bread.

Dependable source of supply

One of the problems of international bean trade is the stability of the source of supply. No matter where beans are grown, they are susceptible to factors that affect production—including disease, early frost, lack of rainfall.

Yet a foreign canner who labels his beans as Michigan navy beans wants to be certain he can get these beans to can year after year, even when the crop is short.

The Association has stressed to European buyers the dependability of

Michigan as a source of navy beans. This dependability was demonstrated in the marketing of the 1965 crop—the shortest in 7 years. Despite the tight supply situation, European canners and importers were able to buy 22 percent of the crop—about the same percentage as they bought in years of normal supply.

Evidences of success

Not only did the 1965 exports show our European buyers that Michigan shippers would not discriminate against them when supplies were short, they also showed us that we now have a stable demand for our beans in Europe. European canners preferred to buy our product despite the high prices resulting from the short crop. They did not want to change to another source for even a short term.

Another indicator of program results is the number of European canners who are now using Michigan navy beans. Here we have made definite progress. For our Amsterdam trade fair exhibits in 1963 we had the product of only one canner on the Continent to display and sample: At

(Continued on page 15)

Good Export Market Foreseen for the Record U.S. Rice Crop

U.S. rice exports reached a record-breaking 43.4 million hundredweight rough (1,418,300 metric tons milled) during the 1965-66 marketing year—2.3 percent higher than the 1964-65 record. Rough rice exports increased by 34 percent, and milled rice by 2 percent.

This record export for the second time in 2 years made the United States the world's second largest exporter of rice, surpassed only by Thailand. Two-thirds of these exports were dollar sales; at the same time, government-financed export sales fell about 18 percent.

In 1965-66 world paddy production (excluding Mainland China) declined sharply to 159 million tons, 12 million less than the previous year. As a result, import demand was strong because several exporters had limited supplies to offer. International prices rose steeply to their highest level in 10 years. Thus, while world rice exports were a little lower than in 1964-65, because of the increased prices the export market value probably reached an alltime high of about 1 billion dollars.

Bigger world crop this year

The 1966-67 world rice crop has shown some recovery, though not as extensive as it would have been had Indian production made more than just a partial comeback.

Production gains in Asia have not been as large as expected. Ceylon's crop was affected by late rains, and a large portion of the crop in Laos was destroyed by flood. The crop in Thailand was late; however, it is estimated that this year it will be in the neighborhood of 10.5 million tons compared with 9.6 million in 1964-65.

Outside Asia, rice production has shown an overall increase in 1966-67. The United States had a record harvest because of a 10-percent increase in rice acreage allotment. In South America the crops of Brazil, Guyana, and Venezuela should provide a substantial supply for

export. Also, there have been good crops in the Mediterranean area—in Spain, Italy, France, and Egypt.

The USSR has substantially increased its irrigated rice acreage, and production has risen. With regard to Mainland China the reports are mixed. The early harvest in South China was announced as larger than last year, but the later rice crops have been affected by drought in some areas and floods in others.

Exports to remain high

The trade outlook is for a continued high level of rice exports in 1966-67. This, however, will tax the available exportable supplies. World carryover stocks are extremely low and are below a reasonable working level.

The import demand will be well sustained first, by the continued high level of requirements in Ceylon, the Philippines, and Vietnam, the latter having been a substantial exporter until 1964; and second, by the return of Indonesia as a major buyer in world markets.

Japan, which has recently been the largest commercial purchaser of rice in the world market, will import rice again this year—though its import requirements may not be as large as last year in view of a better domestic crop this season. In recent years too, there has been a steady rise in imports into the Near East, Africa, Eastern Europe, and Latin America, and this trend will undoubtedly continue in 1966-67.

The United States rice export availability in the 1966-67 marketing year at present is estimated to be somewhat higher than last year's record exports. Consequently, with the rice situation as it currently stands, there should be no difficulties in disposing of the record 1966 crop at prices equal to or higher than those of last year.

—ROBERT A. BIEBER
Grain Division, FAS

Baby Foods Steady Dollar Earners for the United States

Accounting for a small but nevertheless important share of our agricultural exports are baby foods—including milk products; cereals; and canned fruits, vegetables, and meats. These items for the most part have shown good export gains over the past 5 years and together bring in nearly \$15 million a year from a widespread market.

Milk-product exports big

First place among the baby food exports is held by milk-based products under the classification of infant and dietary foods. These milk-based products brought in about \$11 million during calendar year 1965 compared with \$8.8 million during calendar year 1955. Major markets are the Philippines, Egypt, Peru, Hong Kong, and Venezuela. While reduced milk supplies and high prices have severely cut shipments of U.S.-produced nonfat dry milk, butter, and other bulk items, prices of baby foods and specialty milk products have continued competitive. Recent advances in production techniques and packaging have also contributed to the rising trend in U.S. exports of these products. Milk-based infant and dietetic food ex-

ports during the first 11 months of 1966 totaled about 16 million pounds, up 10 percent from 1965.

Gains in fruit, vegetable baby foods

Canned fruits were the No. 2 baby food export in fiscal 1966, earning over \$1 million or two-thirds more than in fiscal 1962. Major markets were Spain, Mexico, and the Canary Islands.

Shipments of canned vegetable baby foods were also well above the level of 5 years earlier. Earnings from them totaled about \$770,000 contrasted with \$470,000 in fiscal 1962. Spain was the largest market, followed by Mexico and the Dominican Republic.

U.S. baby cereal exports totaled about \$950,000 in fiscal 1966, with the Philippines, Venezuela, and Canada the major markets; 5 years ago they fell under a so-called "basket" category.

Canned meats, on the other hand, were recently put under a "basket" classification. Five years ago, they earned \$400,000. Major markets then were Canada, Singapore, and the Philippines.

Japan's Feedgrain Imports Continue To Increase

Japan is expected to import 6.1 million metric tons of feedgrains—3.6 million of corn, 2.0 million of grain sorghum, and a half million of barley—during the July 1966-June 1967 year.

Of the total, the United States is expected to supply about 2.3 million tons of corn, 1.8 million of grain sorghum, and 250,000 of barley, with a c.i.f. value of around \$270 million.

Japan's imports and consumption of feedgrains are likely to continue the upward trend of recent years, but there is a good possibility of a slight slowdown in the rate of increase from that of the last few years.

Japanese consumption of corn in 1966-67 is estimated at 3,640,000 tons, 140,000 tons above that of 1965-66. Feed use of corn is planned at only 40,000 tons above that of a year earlier, as favorably priced grain sorghum is being substituted for corn in mixed feeds.

Use of corn for other purposes (mainly cornstarch) is forecast at around 560,000 tons, compared with 460,000 in 1965-66. Corn starch is currently in good demand because of reduced crops of sweet and white potatoes in 1966.

Consumption of grain sorghums for feed in 1966-67 is estimated at 2.1 million tons, against 1.7 million in the previous year. During January-June 1966, grain sorghum made up 21 percent of total ingredients used in mixed feeds, as compared with 15 percent in the first 6 months of 1965. The mix ratio, particularly in swine feeds, is expected to reflect larger use of grain sorghum as long as its price continues at a favorable level.

Brazil's Wheat Imports Up Sharply in 1966

Brazil's wheat imports in 1966 rose some 30 percent above the 1965 level to an estimated 2,487,000 tons. This sharp gain is attributed to an increase in consumption, as well as a buildup of stocks.

Imports from the United States are estimated at 1,195,000 tons, compared with only 472,000 in the previous year. Of this total, 689,000 tons were commercial imports, including barter, as compared with 277,000 in 1965.

Takings from Argentina, generally the largest supplier, were just a shade under the U.S. total, hitting 1,175,000 tons. By comparison, Argentina supplied Brazil with 962,000 tons of wheat in 1965.

Japan Announces Import Quota for Pulses

The Japanese Ministry of International Trade and Industry (MITI) has announced a quota for imports of pulses totaling \$9.9 million for 1966-67 (Oct.-Sept.). Issued earlier than usual because of a short domestic crop, the quota was somewhat smaller than expected. However, according to reliable sources, an additional quota of about \$5.1 million may be issued late this month or early next and a third for \$8 million in July or August. This will bring the total quota for the year to \$23 million.

The quantity of pulses expected to be imported under

the \$9.9 million quota—about 64,000 metric tons—reflects a higher per unit value than in previous quotas, as MITI expects Azuki beans from Mainland China to be priced higher this year.

Import quotas for this year and the previous two are shown below:

Year ¹	Value Million dollars	Approximate ² quantity 1,000 metric tons
1964-65:		
First quota	10.5	75
Second quota	9.9	70
Total	20.4	145
1965-66:		
First quota	9.9	70
Second quota	7.1	58
Total	17.0	128
1966-67:		
First quota	9.9	64
Second quota	³ 5.1	..
Third quota	³ 8.0	..
Total	23.0	..

¹ Oct.-Sept. ² Figures are based on c.i.f. values, but actual purchases are made on an f.o.b. basis. Consequently, ocean freight charges can be used to increase the amount purchased, which normally exceeds the estimated amount by 10-20 percent. ³ Estimates based on usually reliable sources.

Frozen Food Consumption Up in Sweden

Per capita consumption of frozen food in Sweden amounted to about 18.3 pounds in 1965, compared with about 14 pounds in 1964 and 12 in 1963. The increase included all kinds of food, especially poultry and prepared foods. Deep frozen fish still leads in quantity but is now closely followed by poultry.

The following table shows consumption of frozen foods—excluding ice cream—in Sweden in 1964 and 1965.

Kind	1964		1965		Percentage increase 1964-65
	Quan- tity	Percent of total	Quan- tity	Percent of total	
	Metric tons	Percent	Metric tons	Percent	Percent
Vegetables	8,350	17	10,040	16	20
Berries	1,490	3	1,590	2	7
Juice	280	1	300	1	7
Fish	114,060	29	217,130	27	21
Poultry	10,970	23	15,530	24	42
Prepared foods	36,140	13	8,380	13	36
Meat	6,440	13	7,980	13	24
Bakery prod- ucts, others	700	1	2,870	4	311
Total	48,430	100	63,820	100	32

¹ Includes 1,060 tons "lutfsk" (Christmas-Eve fish, usually ling). ² Includes 840 tons lutfsk. ³ Includes 1,650 tons French-fried potatoes. ⁴ Includes 2,680 tons French-fried potatoes.

Australian Cotton Crop Prospects Improve

Prospects for the 1966-67 (August-July) cotton crop in Australia are much improved after recent heavy rains in New South Wales, the principal producing State.

These timely rains and the increased supply of irrigation water point the way to a 1966-67 crop of around

75,000 bales in that region. Estimated 1966-67 planted area was only slightly below the 55,000 acres of 1965-66.

Heretofore, the supply of irrigation water in the Keepit Dam was insufficient to produce anything like the record 1965-66 crop of 70,000 bales in New South Wales. An additional 8,000 bales in Queensland and 12,000 in the Ord River irrigation scheme brought the 1965-66 total for Australia to 90,000 bales.

Cotton imports in 1965-66, at 65,000 bales, were about half the level of a year earlier, when 35,000 bales came from the United States. The 1965-66 consumption level—132,000 bales—will very likely be exceeded by a few thousand bales in the current season. Stocks on hand on August 1 of 1966 were 90,000 bales.

U.S. Cotton Exports on the Rise

Exports of U.S. cotton amounted to 1,513,000 running bales in the first 4 months (August-November) of the 1966-67 marketing year, 49 percent above the 1,018,000 bales exported in the same months of 1965-66. Exports in November were 518,000 bales, up sharply from the 306,000 bales shipped in October. In October and November 1965, exports were 304,000 and 370,000 bales.

U.S. COTTON EXPORTS BY DESTINATION [Running bales]

Country of destination	Year beginning August 1				
	Average		1965	Nov.-Aug.	
	1955-59	1964		1965	1966
	1,000 bales	1,000 bales	1,000 bales	1,000 bales	1,000 bales
Austria	33	11	3	1	2
Belgium-Lux.	160	80	43	24	27
Denmark	17	6	7	1	2
Finland	22	11	8	2	7
France	360	184	108	41	56
Germany, West	475	217	92	41	65
Italy	416	260	102	34	78
Netherlands	124	65	38	6	9
Norway	10	13	10	4	5
Poland & Danzig ..	85	66	42	14	51
Portugal	28	22	6	3	0
Spain	171	28	10	3	(1)
Sweden	75	58	59	27	27
Switzerland	64	66	35	14	27
United Kingdom ..	525	153	131	46	53
Yugoslavia	108	109	169	54	59
Other Europe	17	11	12	5	1
Total Europe	2,690	1,360	875	320	469
Australia	54	60	33	11	4
Canada	217	390	269	98	65
Chile	35	1	3	(1)	(1)
Colombia	33	1	57	24	1
Cuba	27	0	0	0	0
Ethiopia	4	4	20	5	2
Hong Kong	134	150	94	39	65
India	184	243	63	16	23
Indonesia	30	47	(1)	0	78
Israel	16	23	5	3	1
Japan	1,154	990	705	225	423
Korea, Rep. of	205	261	301	113	105
Morocco	10	12	12	3	4
Pakistan	14	9	6	1	1
Philippines	64	75	93	22	51
South Africa	26	43	27	12	10
Taiwan (Formosa) ..	153	203	178	51	124
Thailand	4	55	55	24	28
Uruguay	15	0	(1)	0	0
Venezuela	2	6	5	3	(1)
Vietnam ²	2	63	73	20	30
Other countries	27	64	68	28	29
Total	5,100	4,060	2,942	1,018	1,513

¹ Less than 500 bales. ² Indochina prior to 1958. Includes Laos and Cambodia.

Floods Damage Australian Tobacco Crop

Heavy rains in mid-December, together with resulting flash floods, are reported to have seriously affected prospects for the 1966-67 flue-cured tobacco crop in Victoria, Australia. Despite the losses, industry sources believe that the country's overall production quota of 26 million pounds will be reached. Indications are that a bumper crop in Queensland will be harvested this year—offsetting any shortfall that may occur in Victoria.

U.S. Tobacco Exports—November 1966

U.S. exports of unmanufactured tobacco in November 1966, at 70.2 million pounds, were slightly under the 71.3 million shipped out in November 1965. The export value was \$62.2 million compared with \$60.8 million.

Flue-cured exports in November 1966 were 52.8 million pounds, compared with 55.1 million for November 1965. Burley exports totaled 5.9 million, against 5.2 million.

Total exports for the first 11 months of 1966 were 478.9 million pounds—up 18 percent from those during the same period of 1965.

Exports of tobacco products in November 1966 were valued at \$11.3 million, compared with \$10.2 million in the previous November. For the first 11 months of 1966, the total value of all tobacco product exports was \$119.8 million—up 9.5 percent from the previous year.

U.S. EXPORTS OF UNMANUFACTURED TOBACCO [Export weight]

Kind	November		January-November		Change from 1965
	1965	1966	1965	1966	
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
Flue-cured ...	55,109	52,773	299,912	361,691	+20.6
Burley	5,223	5,906	41,905	42,365	+1.1
Dark-fired Ky.-Tenn. ..	2,740	1,757	18,188	15,200	-16.4
Va. fire-cured ¹	662	1,402	6,022	7,465	+24.0
Maryland	1,133	1,038	9,570	9,160	-4.3
Green River ..	56	5	570	462	-18.9
One Sucker ..	279	296	891	425	-52.3
Black Fat ...	147	265	3,278	3,153	-3.8
Cigar wrapper..	351	168	3,736	4,253	+13.8
Cigar binder..	68	73	2,323	1,857	-20.1
Cigar filler....	10	258	657	1,557	+137.0
Other	5,495	6,241	18,735	31,266	+66.9
Total	71,273	70,182	405,787	478,854	+18.0
Declared value	Mil. dol. 60.8	Mil. dol. 62.2	Mil. dol. 327.7	Mil. dol. 414.1	Percent +26.4

¹ Includes sun-cured.
Bureau of the Census.

U.S. EXPORTS OF TOBACCO PRODUCTS

Kind	November		January-November		Change from 1965
	1965	1966	1965	1966	
	1,000 pieces	1,000 pieces	1,000 pieces	1,000 pieces	Percent
Cigars and cheroots ...	3,630	4,775	50,533	69,122	+36.8
Cigarettes	1,700	1,941	20,759	21,880	+5.4
Chewing and snuff	53	40	335	345	+3.0
Smoking tobacco in pkgs.	58	116	844	923	+9.4
Smoking tobacco in bulk	2,144	1,593	11,194	12,858	+14.9
Total declared value	10.2	11.3	109.4	119.8	+9.5
Bureau of the Census.					

Cashew Shelling Plant for Mozambique

Mozambique's newest fully mechanized plant for shelling cashews began operation December 10, 1966. Located in Inhambane, a coastal town about 200 miles north of Lourenco Marques, the \$525,000 factory is stated to have an annual production of 6,000 metric tons of cashew kernels. About 2,900 should have been shelled before the end of 1966.

The new plant brings to five the total number of mechanized cashew-shelling plants in Mozambique. The five, with a total shelling capacity of about 25,000 metric tons of kernels, could handle over two-thirds of the country's current cashew crop. The bulk of the cashew kernel and shell liquid output is for the export market, principally the United States.

(For additional information on Mozambique's cashew industry, see *Foreign Agriculture*, Nov. 7, page 17.)

Japan Contracts for Purchase of Chinese Soybeans

Japanese importers finalized negotiations with Mainland Chinese exporters on November 21 for the purchase of 250,000 metric tons (9.2 mil. bu.) of soybeans during the fifth year (1967) of the Liao-Takasaki (L-T) trade agreement.

This is 30,000 tons less than the 280,000 tons (10.3 mil. bu.) contracted under the L-T agreement in 1965 and again in 1966. During the last 3 years, quantities contracted under this agreement have accounted for roughly three-fourths of total soybean imports from Mainland China.

Contracts for December-April shipment concluded at the Canton Trade Fair had reached 62,000 tons as of early December.

Japan imported 345,813 tons (12.7 mil. bu.) of soybeans from Mainland China during January-October 1966, compared with 343,468 tons (12.6 mil. bu.) in the first 10 months of 1965. During the same period, Japan imported 1,472,720 tons (54.1 mil. bu.) of U.S. soybeans against 1,162,937 tons (42.7 mil. bu.) a year earlier.

Opening of Senegal Peanut Marketings Delayed

The opening date for Senegal's 1966-67 peanut marketing season was set for January 2, 1967, in most regions, according to a press report. This is 3 weeks later than usual—the result of unfavorable weather last summer.

Senegal's 1966-67 peanut crop is now estimated at 800,000 metric tons, of which 650,000 are expected to enter commercial channels for crushing and export. The 1965-66 crop was officially estimated at 1,121,925 tons, and the net commercial crop, at 960,000 tons.

During the current season, farmers will again sell their peanuts at a fixed price, subject to deductions for seed and for grain advances during the period between depletion of old crop grain stocks and the harvesting of new crops. The price to producers has been fixed at 18 to 22 CFA francs per kilogram (3 to 4 U.S. cents per lb.), the same as in 1965-66.

To be continued this season, with stricter controls and administration, is the practice initiated last year of paying the producer only 90 percent of the value of his peanuts with the remaining payments to be made later subject to deductions for waste and impurities. In addition, a freight

bureau has been established by the Office Commercialisation Agricole (OCA). The objective of the office is to lower the cost of delivering peanuts from production areas to the ports.

The above measures are designed to offset as much as possible reduced quantities from the 1966-67 crop by improving the quality and to make the delivered price to OCA as low as possible. Application of the measures was necessary not only because of the reduced 1966-67 crop, but also because, under the Yaounde Convention, 1967-68 will mark the end of bilateral Franco-Senegalese trade preferences and the beginning of stronger international competition for Senegalese peanuts.

WORLD CROPS AND MARKETS INDEX

Cotton

- 13 Australian Cotton Crop Prospects Improve
- 14 U.S. Cotton Exports on the Rise

Fats, Oilseeds, and Oils

- 15 Japan Contracts for Purchase of Chinese Soybeans
- 15 Opening of Senegal Peanut Marketing Delayed

Fruits, Vegetables, and Nuts

- 15 Cashew Shelling Plant for Mozambique

General

- 13 Frozen Food Consumption Up in Sweden

Grains, Feeds, Pulses, and Seeds

- 13 Japan's Feedgrain Imports Continue To Increase
- 13 Brazil's Wheat Imports Up Sharply in 1966
- 13 Japan Announces Import Quota for Pulses

Tobacco

- 14 Floods Damage Australian Tobacco Crop
- 14 U.S. Tobacco Exports—November 1966

Glamour Treatment Aids Bean Exports

(Continued from page 11)

the Munich fair last September we had products of seven canners from Northern Europe alone.

If our progress in developing markets abroad continues in the next few years at the current rate it is conceivable that nearly 50 percent of Michigan navy bean production will be going into the export market.

Some present problems

Many problems still exist for the Association in developing markets on the Continent, but generally these problems have arisen because of our past successes.

For example, one of the most immediate matters demanding attention is to find a way to get more Michigan navy beans to the European market sooner. In past years, when fewer beans were exported to Europe, buyers could wait until August or September to buy their beans and be certain that they would be shipped before the St. Lawrence Seaway froze for the winter. Now, with greater total shipments each year, the assurances of shipment before "freeze-up" are not certain. It is essential that we find a way to speed up our shipping.

Another problem is to find ways to enable European canners to improve their canned products. Much work of a technical nature needs to be done to find the solution for this problem.

OFFICIAL BUSINESS

To change your address or stop mailing,
tear off this sheet and send to Foreign
Agricultural Service, U.S. Dept. of Agriculture,
Rm. 5918, Washington, D.C. 20250.

Highlights of the Agriculture and Trade of the Sudan

Resources:—Sudan, with an area of 967,500 square miles, is the largest country in Africa and is bigger than the United States east of the Mississippi River. Population, growing at an annual rate of 2.9 percent, reached 13.9 million in mid-1966. The economy depends heavily on agriculture, cotton in particular. About 85 percent of the labor force is engaged in agriculture, which provides about half of the Gross National Product. Estimated GNP for 1965 was \$1.4 billion. Per capita GNP for 1965 was about \$102.

Agriculture:—Because most of the country is so dry, just 3 percent of the land is under cultivation. An additional 15 percent is classified as potentially productive. Only a very small fraction of the land is suitable for un-irrigated crops, and droughts threaten these. Large areas of the central region could be put into crops if brought under irrigation. Between the Blue Nile and the White Nile, and from their confluence southward, there is a 5-million-acre plain called the Gezira. Here, about 1.8 million acres are under gravity flow irrigation, and the country's major agricultural scheme produces most of the country's cotton, by far the most important crop produced in Sudan. This area is laid out in 40-acre lots where cotton is rotated with durra (sorghum) and lubia legume forage. Standardized cultural practices are followed in an operation that is a triple partnership. The government rents the land to a tenant who works it under the management of the Gezira Board. Schemes in other areas are patterned after this relatively successful system.

Agricultural imports, valued at \$37.2 million in 1965, made up less than a fifth of all imports; in poor crop years the percentage increases. Sugar, coffee, tea, wheat, and flour normally make up most of the agricultural imports.

The United States generally ranks among the leading trading partners. Other ranking traders are the United Kingdom, Japan, West Germany, India, and Italy.

Agricultural trade with the United States:—The total value of U.S. farm exports to the Sudan amounted to \$8.4 million in 1965. Of this, \$7.5 million was wheat and wheat flour. Tobacco at \$355,000 was the largest of the other agricultural exports. In 1965, U.S. agricultural im-

ports from Sudan were valued at \$1.3 million; nearly half of this was hides and skins; cotton, sesameseed, and gum arabic accounted for most of the remainder. The most recent Public Law 480 agreement with Sudan was signed in April 1966 and programed 65,000 tons of U.S. wheat and wheat flour for consumption in Sudan.

Factors affecting agricultural trade with the U.S.:—Generally the Sudan maintains a free trade policy. With the exception of products from the UAR, customs tariff is applicable to all goods without preference. It is primarily revenue producing rather than protective.

Other crops grown in the Sudan include wheat, barley, millet, corn, cassava, potatoes, dates, citrus, and vegetables. Livestock are numerous and constitute a valuable asset, and although many are kept in farmed areas, nomadic and seminomadic tribes raise a great number. Tribal customs dictate holding animals as wealth and status rather than for purely economic gain. Improved management practices could raise livestock's contribution to Sudan's economy in the future. According to the USDA index, agricultural production in 1966 was 23 percent greater than in 1957-59 and down 9 to 10 percent from 1965.

Food situation:—Cotton, peanuts, and small quantities of other items are grown for export, but most crops are grown solely for local consumption. Using the 1959-61 average, the per capita caloric intake was about 2,200 per day. Cereals provide about 60 percent of the calories and animal products 13 percent more. In good crop years Sudan produces enough food to satisfy most of its needs. Imported food usually amounts to less than 10 percent of the total consumed.

Foreign trade:—About 98 percent of the Sudan's foreign exchange earnings accrue from agricultural exports. Tariffs are specific for some commodities, such as alcoholic beverages and tobacco. But *ad valorem* tariffs predominate and range from "free" to 400 percent. Luxury goods draw the very high rates. Import licenses protect locally produced items while essential commodities are imported under open general license.

—H. CHARLES TREACKLE
Foreign Regional Analysis Division, ERS